

ment on such flights. In addition to the U.K., many flights have been undertaken to Europe, to such places as Copenhagen, Paris, and Majorca. At the present time the air wing is limited to sitting cases in its own aircraft and charters air ambulances for stretcher cases. It is hoped that an aircraft may be made available to us in the future for the carriage of stretcher cases. If any of your readers are able to help us in this respect it will enable us to reduce the cost to the patient even further.

All pilots, controllers, and medical and nursing air attendants give their time free, the only expense involved being the running cost of the aircraft and odd items such as landing fees. We shall be pleased to supply further information to any interested readers.—I am, etc.,

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Active Management of Labour

SIR,—Recent letters on this subject (11 August, p. 352, and 25 August, p. 453) have given us no reason to alter the opinion that pain in labour is an emotive subject.

In our paper (21 July, p. 135) we sought to emphasize that the problem of pain in labour should not be considered in isolation; we did not dispute that labour is often painful or that epidural block provides a highly effective method of pain relief, and we further recognize that it may not have been sufficiently utilized in our patients. This is, however, a far cry from the suggestion by Professor Selwyn Crawford (25 August, p. 453) that epidural anaesthesia should be recommended to all patients, even to multi-gravidae before labour has started.

When the results of epidural anaesthesia in labour are evaluated the total welfare of mother and child must be considered and this must at least include an explicit account of perinatal deaths, necropsy examinations, and cases of possible brain damage. To take one important example, between 1963 and 1970 there were 17 perinatal deaths from traumatic intracranial haemorrhage, proved at necropsy, among first-born infants with cephalic presentations in this hospital. Fifteen were delivered with forceps. The incidence of fatal head injury was almost 100 times as high in infants delivered by forceps. Even the most enthusiastic supporters of epidural anaesthesia concede a high incidence of forceps, particularly in primigravidae, and the implications of this for both mother and child have not received nearly enough attention.

The responsibility for mother and child in labour rests with the obstetrician, and the problem of pain is only one, albeit important, aspect of his care in which safety must take precedence above all else. The place of epidural anaesthesia in first labours is not yet clear, but it can be evaluated only in a situation where the management of labour is under strict control and all other important factors are taken into account. We are presently engaged in an attempt at objective assessment of this and the results will be published in due course.

In conclusion we regret Professor Crawford's reference to Grantly Dick Read, who did so much to advance our appreciation of

the need for education for childbirth.—We are, etc.,

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Irradiation of C.N.S. in Leukaemia

SIR,—I feel that I must take issue with the arbitrary way in which Dr. D. G. McGowan (21 July, p. 170) has selected certain figures from the St. Jude (Memphis) Total VI study in order to question the early results of the Medical Research Council study (19 May, p. 381) and the value of prophylactic treatment of the central nervous system in childhood leukaemia in general. I am sure there will be comment from the writers of the M.R.C. report, and I will therefore restrict mine to the data he has culled from the St. Jude Total VI study.

In questioning the effects of this treatment on survival Dr. McGowan ignores the fact that the St. Jude group has repeatedly stressed, and elegantly demonstrated¹ that early survival figures (that is, about four years from the start of the trial from which he quotes) are misleading. With current therapy it is possible to keep many patients alive for prolonged periods through several relapses, even though they will eventually die. Patients who relapse after adequate treatment have infrequently become long-term survivors. Since "we are now thinking in terms of cure," to quote his own words, he should use the continuous complete remission rate, which is the quickest and most reliable index of long-term leukaemia-free survival. The figures of 30/45 (66%) survivors in the prophylactic treatment group and 29/49 (60%) in the non-prophylactic group which he quotes are very misleading when compared with the published continuous complete remission rates of 29/45 (64%) and 11/49 (22%) respectively for the same groups of patients.¹ The same argument holds true for the haematological relapse rates referred to in his second question.

When Dr. McGowan turns to the effects of C.N.S. prophylaxis on C.N.S. leukaemia in the same study he quotes figures of 3/45 (6.7%) of patients in the prophylactic treatment group subsequently developing C.N.S. leukaemia. He then compares this with figures from a much earlier report for the non-prophylactic group of 5/47 (10.6%) treated for C.N.S. disease who had subsequently had C.N.S. recurrence (two patients excluded who were actually receiving radiation for C.N.S. disease). The data published by the St. Jude group¹ show that at a time when 2/45 (4.4%) of the prophylactically treated group had developed C.N.S. disease, 46 months from the onset of the study, 32/49 (65.3%) of the non-prophylactic group had developed C.N.S. disease, and only 15 of the 32 C.N.S.-relapsed patients remained in a second complete remission, 9/17 (>50%) second relapses having involved the C.N.S. despite therapeutic radiation. Even if these figures did not speak so eloquently for themselves, it is surely statistical nonsense to compare the percentage of relapses in one group given prophylactic radiation early with those given therapeutic radiation much later without taking account of the very substantial difference in time at risk of developing

C.N.S. disease subsequent to radiation in the two groups.

Finally, there is the question of the potential hazards of C.N.S. radiation. These are, of course, a matter of considerable concern and debate, and no doubt we will all be relieved when someone finds an effective and less potentially toxic form of prophylactic treatment, or an effective form of therapeutic treatment, so that the 20% of patients who will not develop C.N.S. disease in the long term may be spared unnecessary treatment. As things stand at present, however, prophylactic C.N.S. radiation has revolutionized the treatment of childhood acute lymphoblastic leukaemia and provided the prospect of eradication of the disease in the majority of cases. It will require strong grounds indeed to justify ethically the withholding of this treatment from the current generation of patients, even if some of them do develop the potential complications mentioned, until an effective substitute has been found.—I am, etc.,

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¹ Simone, J., Aur, R. J. A., Hustu, H. A., and Pinkel, D., *Cancer*, 1972, **30**, 1488.

Economics of Varicose Veins

SIR,—In your leading article (16 June, p. 626) you state that "because sclerotherapy can be undertaken on an outpatient basis, patients usually prefer it to surgical treatment. It is an economic help to them, for they can continue with normal activities while under treatment. Another advantage is that pressure on expensive bed and theatre time is reduced."

As a result of experience with more than 4,000 stripping operations for varicose veins the length of hospital stay has been decreased so that stripping procedures can now be performed on a fully ambulatory basis. Five hundred patients have been operated upon on an ambulatory basis.¹ The patient is admitted to the hospital at 7.30 a.m. and discharged between 2 and 5 p.m. The operation is performed under a light general anaesthesia. The ambulatory technique minimizes postoperative morbidity. The patient is instructed to work and carry out all usual activities the day following surgery. With this technique there has been a great saving of hospital beds and work-hours lost to industry. Even before the ambulatory technique was started, about 3,500 patients were operated upon on a semi-ambulatory basis. The patient was admitted to the hospital the evening before surgery. Operation was performed the next morning and the patient discharged the same day or the following morning at the latest. An elastic support is necessary for 10-14 days following surgery, whereas with the injection-compression technique the bandage is used for much longer periods. Following operation, only about two postoperative visits are necessary for suture removal or possible injections for residual varices.

Since surgery can now be performed on an ambulatory basis, it is especially important to disregard economic factors and concentrate on specific indications. With marked valvular insufficiency and large varices ligation and stripping is more effective. Injection